

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for the preparation of an aqueous dispersion of an anionic polyurethane in which initially a tertiary aminofunctional acrylic monomer of formula I:



wherein R, R¹, R², R³, and R⁴ and R⁵ are organic groups which have no reactivity towards the double bond or the tertiary amine function;

is used as neutralizing agent for pendant carboxylic acid groups in dispersions of a polyurethane or a polyurethane-polyacrylate, whereafter the unsaturated monomers undergo in situ an addition polymerization; and

wherein the aqueous dispersion of the anionic polyurethane is prepared by the steps of preparing an isocyanate functional anionic polyurethane prepolymer, containing carboxylic acid

functions optionally in the presence of vinylic monomers mixing the isocyanate terminated anionic polyurethane prepolymer with a tertiary amino functional unsaturated monomer and optionally other vinylic monomers followed by dispersing of the obtained mixture into water, and chain extension of the polyurethane prepolymer with an active hydrogen compound during or after the dispersion in water, initiating radical polymerization of the vinylic monomers, including the tertiary amino functional unsaturated monomers.

Claim 2 (previously amended): A process according to claim 1, in which the isocyanate terminated prepolymer is reacted with 0-100% of a stoichiometric amount of a hydroxy functional unsaturated monomer before the dispersion of water.

Claim 3 (previously amended): A process according to claim 1, in which the tertiary amine functional acrylic oligomer or polymer is formed during the process by radical polymerization of tertiary amine functional unsaturated monomers.

Claim 4 (previously amended): A process according to claim 1, in which the tertiary amine functional unsaturated monomers react together with other vinylic monomers during the radical

polymerization to obtain a tertiary amine functional co-polymer.

Claim 5 (previously amended): A process according to claim 1, wherein the tertiary amine functional unsaturated monomer is a dimethylaminoalkyl acrylate, a dialkylaminoalkyl methacrylate, a dialkylaminoalkoxy acrylate and/or a dialkyl-aminoalkoxy methacrylate.

Claim 6 (currently amended): A process according to claim 1, wherein the tertiary amine functional unsaturated monomer is dimethylaminoethyl acrylate, dimethylaminoethyl methacrylate, diethylaminoethyl acrylate, diethylaminoethyl methacrylate, or 2-(diethylamino)-ethanol-vinylether.

Claim 7 (previously amended): A process according to claim 1, wherein the tertiary amine functional unsaturated monomer is present in a ratio to the anionic residues to be neutralized in the polyurethane prepolymer from between approximately 0.3 to 2.

Claim 8 (previously amended): A process according to claim 1, wherein the anionic group in the polyurethane or in the polyurethane/polyacrylate hybrid is a carboxyl, a sulphonic, a sulphate and/or a phosphate group.

Claim 9 (currently amended): A process according to claim 1, wherein the amount of carboxylic acid functions in the isocyanate functional polyurethane prepolymer is from approximately 1 weight % to 15 weight %.

Claim 10 (previously amended): A process according to claim 2 wherein the hydroxy functional unsaturated monomer is a hydroxy functional acrylate or methacrylate selected from the group consisting of hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxy-propyl acrylate, hydroxypropyl methacrylate, hydroxybutyl acrylate, hydroxybutyl methacrylate, and hydroxy-polyester acrylate or methacrylate.

Claim 11 (previously amended): A process according to claim 1, wherein the other vinylic monomers are selected from acrylic or methacrylic alkyl esters.

Claim 12 (currently amended): A process according to claim 11, wherein the other vinylic monomers are present in an amount of approximately 0 weight % to 90 weight %.

Claim 13 (previously amended): A process according to claim 1, wherein the polyurethane and/or the acrylic monomers contain additional functional groups selected from the group consisting of polyalkoxy functions with a large concentration of ethoxy functions, tertiary amine or quaternary amine functions, perfluor functions, incorporated silicon functions, hydrazide functions or hydrazone functions, ketone, acetoacetate, hydroxy, methylol, amide, glycidyl, and ureido or aldehyde functions.

Claim 14 (previously amended): A process according to claim 1, wherein a conventional non-ionic, anionic or cationic surfactant is applied during the dispersion of the prepolymer solution in water.

Claim 15 (previously amended): A dispersion prepared by the process of claim 1.

Claim 16 (previously amended): A coating or film obtained from a dispersion prepared by the process of claim 1.

Claim 17 (new): A process according to claim 1 wherein R groups are hydrogen.

Claim 18 (new): A process according to claim 1 wherein the step of preparing an isocyanate functional anionic polyurethane prepolymer comprises, in the presence of vinylic monomers, mixing the isocyanate terminated anionic polyurethane prepolymer with one or more tertiary-amino functional unsaturated monomer and then dispersing the obtained mixture into water, and chain extending the polyurethane prepolymer with an active hydrogen compound during or after the dispersion in water, thereby initiating radical polymerization of the vinylic monomers including the tertiary amino functional unsaturated monomers.

Claim 19 (new): A process according to claim 18 wherein the preparing step is performed in the presence of vinylic monomers other than the tertiary-amino functional unsaturated monomers..